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Individual and simultaneous electrochemical determination of metanil yellow and curcumin on carbon quantum dots based glassy carbon electrode

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Highlights

- The glassy carbon based carbon quantum dots modified electrode was fabricated (CQDs/GCE).
- The developed CQDs/GCE was employed for the individual and simultaneous electrochemical detection of MY & CU.
- With the fabricated electrode a lower detection limit of 0.03 μM and 0.1 μM corresponding to MY and CU was achieved.
- CQDs/GCE is a promising candidate to develop methodology for the simultaneous determination of CU and MY in turmeric powder.
- The interference studies revealed that the CU, demethoxy & bisdemethoxycurcumin did not interfere in the determination of MY.